MEMORANDUM FOR UNDER SECRETARY FOR NUCLEAR
SECURITY/ADMINISTRATOR FOR NATIONAL
NUCLEAR SECURITY

UNDER SECRETARY FOR ENERGY, SCIENCE AND
ENVIRONMENT

FROM: KYLE E. McSLARROW

SUBJECT: Configuration Management for Department of Energy
Business Management Systems

The Office of Management, Budget and Evaluation is leading the integration of the Department's corporate business management information systems. This initiative, formerly known as BMIS/Phoenix, now known as the Integrated Management Navigation System (I-MANAGE) project, will consolidate and streamline departmental efforts to integrate financial, budgetary, accounting, procurement, personnel, program performance, and facilities management information. The I-MANAGE Program will also accomplish a significant portion of the Department's e-Government Strategic Action plan. That plan, developed by the Office of Chief Information Officer (OCIO), includes implementing the Secretary's vision of integrated DOE business management systems.

It is critical that as requirements baselines change or new requirements for business systems are identified, input is solicited from all interested parties. Although the requirements baseline should be fairly rigid once established, certain configuration changes may be necessary over time to address evolving requirements and user needs. Furthermore, spending on legacy business management systems should be kept to a minimum as the various I-MANAGE system modules are developed and implemented. A Configuration Management (CM) process is therefore required to ensure that important reasons exist for proposed system changes or new business systems development, that all implications are clearly delineated and considered, and that an "audit trail" is maintained regarding configuration evolution. CM also reduces overlap and redundancy in departmental systems development efforts; assists budget and performance integration; and integrates DOE business management and administrative systems with respect to functions and data.

This memorandum and the attached plan establish a systematic Configuration Management process for modifications and enhancements to Department of Energy business management systems. The Configuration Control Board described in the attached plan must be established, and its membership is listed in Section 3.2. The organizations listed need to each provide a representative to the Configuration Control Board and be ready to fulfill the duties as identified.

In addition, the systems baseline at Appendix A must be reviewed periodically to ensure that it includes all business systems under the control of the CM Plan. The systems baseline was developed by the OCIO in connection with Enterprise Architecture efforts and may need to be updated. Therefore, where additions and changes are necessary, organizations should identify the system owner, name, and life-cycle status. Likewise, organizations should identify baseline systems included in the list that have since been retired.

If you have any questions or need additional information, please contact Mr. Chris Simpson, Director, Office of Management Analysis, at 202/586-4310.

Attachment

Distribution List:
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      Administration
Assistant Secretary for Energy Efficiency and Renewable Energy
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U. S. Department of Energy
Chief Information Officer

DOE Business Systems
Configuration Management Plan

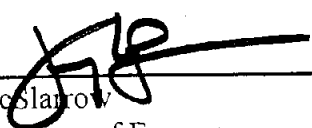# October 2003

Version 1.9

TITLE PAGE

Document Name: *DOE Business Systems Configuration Management Plan*

Approval: _____
                   Kyle E. McSlarrow
                   Deputy Secretary of Energy

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1. Introduction

1.1. Purpose of Configuration Management

Configuration Management (CM) is a formalized process to manage proposed system changes and provide an "audit trail" to manage and maintain the evolution of system configurations. CM provides this rigorous review and supports these DOE corporate systems management goals:

- Systems integration;
- Prioritization of expenditures;
- Conformity with established DOE Corporate Enterprise Architecture; and,
- Alignment with the President's Management Agenda.

Specifically, CM provides an opportunity to thoroughly assess the impact of acquisitions, proposed changes in terms of ultimate cost, technical strength, and business need. CM also reduces overlap and redundancy in systems, assists budget and performance integration, and integrates DOE administrative systems with respect to functions and data.

1.2. Scope

This CM Plan applies to all DOE business systems, including NNSA. Appendix A identifies the systems currently comprising the systems inventory baseline. Over time, the inventory composition will need to be audited and updated to reflect the evolution and status of the systems. The CCB will approve the up-to-date systems baseline by life-cycle stage.

This CM Plan is also intended to reinforce and extend the practice of CM processes that already exist within DOE. It describes the process that DOE will follow in managing its corporate business systems and the roles and duties that implement the process. Other CM plans currently exist at the systems level for particular applications, as well as at a higher, summary level for Offices. The owners of those plans will be required to submit CCPs and follow the CM process so that the discipline extends consistently from the individual system to the corporate level.

2. Principles of Configuration Management

Configuration Management is a discipline for exercising control over changes. A CM Plan establishes a baseline, defines the rules for changing that baseline, and records changes as they occur, thereby providing an auditable trail of events. That is, the origin of changes and their status at any subsequent point can be readily identified.

Configuration Management originated as a method for keeping track of the numerous and extremely granular changes to complex systems; however, CM principles apply equally well to the larger management environment. OMBE and OCIO will jointly manage the CM process at the corporate level. "Management" in this context means keeping track of costs and schedules

associated with changes. The CM process will support the associated decision processes to achieve and sustain cost-effective strategic alignment of the corporate systems.

The following table summarizes the principles of CM.

Configuration Identification	Listing the items that fall under the CM process and listing the characteristics of each. These are called Configuration Items.
Configuration Control	Maintaining rules and procedures that govern making changes to Configuration Items as well as keeping track of the changes.
Status Accounting	Reporting information associated with the changes, particularly the status of proposed changes and changes in the process of being implemented.

In this document, Section 3 defines Roles and Responsibilities; Section 4 describes Configuration Control Guidelines for DOE business systems; and Section 5 describes the Configuration Control Process. In addition, Appendix A outlines the DOE Enterprise Architecture Systems Baseline; Appendix B contains relevant forms; Appendix C lists Configuration Management Acronyms; and Appendix D contains a Glossary of Configuration Management Terms.

3. Roles and Responsibilities

3.1. Overview

The organizational structure of the CM process is composed of three entities:

- Configuration Control Board (CCB);
- Review Group; and,
- CM Secretariat.

The CCB is the executive arm of the CM process. The CCB retains authority for final approval of the Configuration Change Proposal (CCP); is the primary entity engaged in monitoring the status of corporate systems; and, provides input to OCIO and OMBE management decisions on budget authority for systems activities.

The Review Group is the analytic and deliberative arm of the CM process and will be responsible for reviewing proposed CCPs in detail and reporting its findings and providing recommendations to the CCB, including, but not limited to:

- acquisition of new systems;
- changes to systems currently under development (including changes in project scope) and budget allocations; and,
- modifications to legacy systems.

The Review Group consists of three members of the CCB, as assigned by the Co-Chairs of the CCB, and is supported by the organization submitting the CCP, the I-MANAGE Team and the Enterprise Architecture Group. This group will have a Chair to ensure that results of the reviews reflect the rules of the CM Plan and that the appropriate input is solicited from the interested organizations prior to making recommendations to the CCB.

The CM Secretariat is the administrative arm of the CM process to support the Review Group and the CCB. The Secretariat maintains the systems baseline inventory and records change activity. It offers logistical assistance for the CCB and its meetings, maintains the library of forms and templates, and is responsible for the audit trail for all CCPs. The Secretariat has no voting role in the CM process.

Figure 1 below depicts the organizations and hierarchy of the CM process. The sections following the diagram, describe the composition and duties of the CCB, the Review Group, the Secretariat, and other entities involved in the CM process.
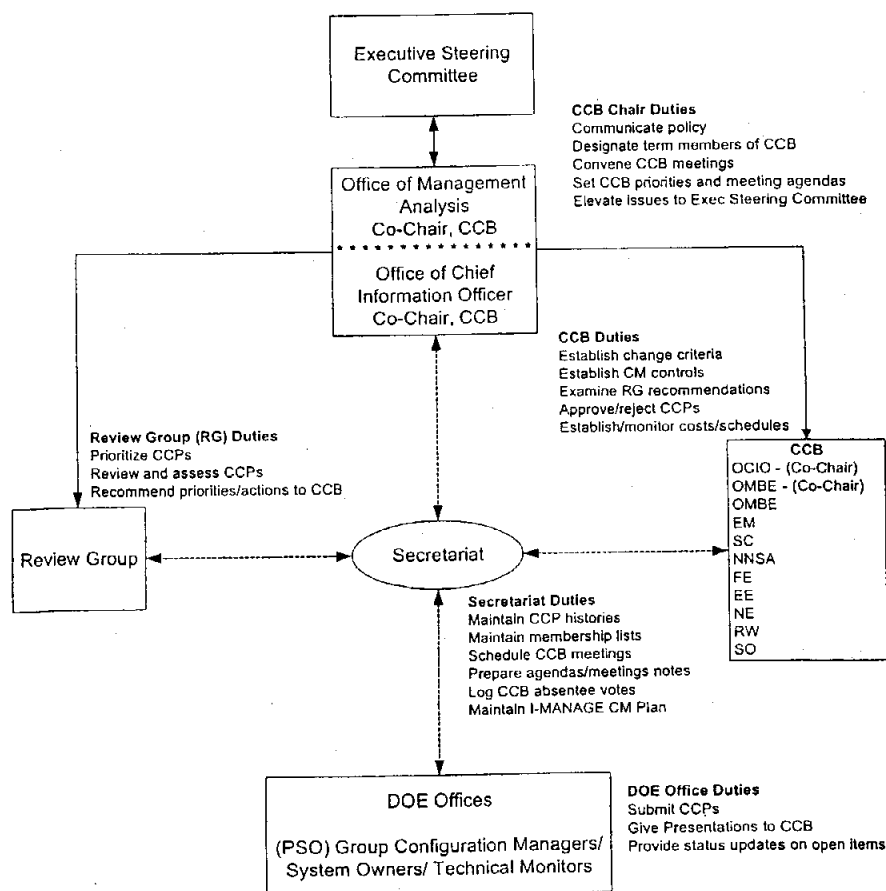
Configuration Management Organizations and Hierarchy

Figure 1

3.2. Configuration Control Board (CCB)

The CCB will meet the first Tuesday of every month and consists of two Co-Chairs and 9 members. A representative from any of these offices may attend.

HQ	Office of Management Analysis (ME-2.5) - Co-Chair
HQ	Office of the Chief Information Officer (IM/OCIO) – Co-Chair
HQ	Office of Management, Budget and Evaluation (OMBE)
HQ	Office of Environmental Management (EM)
HQ	Office of Science (SC)
HQ	National Nuclear Security Administration (NNSA)
HQ	Office of Fossil Energy (FE)
HQ	Office of Energy Efficiency Renewable Energy (EE)
HQ	Office of Nuclear Energy, Science and Technology (NE)
HQ	Office of Civilian Radioactive Waste Management (RW)
HQ	Office of Security (SO)

The responsibilities of the CCB Co-Chairs are to:

- Communicate OCIO and OMBE management policy to the CCB;
- Assign members of the Review Group;
- Solicit CCB representation from the identified DOE offices;
- Authorize changes to the criteria for change items subject to the CM process (Section 4.2);
- Convene scheduled and unscheduled meetings of the CCB;
- Set CCB priorities and meeting agendas; and,
- Elevate issues and report CCB decisions to OCIO and OMBE management.

The CCB Co-Chairs may modify the composition of the Board as events warrant. The Co-Chairs may from time to time request assistance from other DOE organizations to address particular matters that come before the Board.

The responsibilities of the CCB are to:

- Establish and publicize qualifying criteria for changes;
- Establish controls for CCPs;
- Review recommendations submitted by the Review Group;
- Issue final approval/disapproval of CCPs;
- Set timeframes for implementation;
- Monitor the status of approved CCPs;
- Identify and take action on non-compliance with CM controls; and,
- Act upon requests for exceptions.

3.3. Review Group

An essential aspect of the CM process is to assess CCPs in detail. Members of the Review Group will be responsible for acquiring the necessary information to adequately review and report their recommendations to the CCB.

The purpose of the Review Group is to determine whether the CCP furthers the OCIO and OMBE management objectives of systems integration, reliability, and conformance to the DOE Business and Corporate Enterprise Architectures, sound development methodology, avoidance of duplicative development efforts, fiscal responsibility, and principles of good business management. The relevant constituency whose interests must be served is the DOE corporate community. The primary areas of responsibility will be:

- Business Function - The CCP will be reviewed with respect to the Business Functions involved. A determination will be made as to whether the proposal represents a reasonable addition to the business functions and scope already present in the system, or whether the DOE community is better served by an alternative solution. The CCP will also be evaluated in light of the management priorities established by DOE management.

- Technical/Architectural - The CCP will be reviewed with respect to its technical robustness and conformity with DOE enterprise architecture. The emphasis here is not on the technical infrastructure proper because the OCIO enforces CM in the infrastructure area; however, at the application level, there are technical issues to probe, particularly for systems that are used not only by Headquarters, but also by the Field Offices and National Laboratories.

- Implementation - Not all CCPs will require implementation analysis. Implementation review is relevant when new systems are proposed or major modules are added to existing systems. The review must address whether implementation issues exist, such as changes in current business practices or a need for user training, and whether they have been adequately addressed. Where issues have not been adequately addressed, required changes to business rules must be identified.

The CCB Co-Chairs will select three members of the CCB for one-year rotating terms. From the three members, a Chair will be selected to facilitate the reviews. The Chair will have the responsibility to find the resources within DOE to conduct the reviews. On an exception basis, the I-MANAGE team and the Enterprise Architecture Group will be available to provide input and advice. The CM Secretariat will provide administrative support to the Review Group.

3.4. CM Secretariat

The practice of CM entails considerable record keeping and logistic efforts. The CCB Co-Chairs will oversee creation of a Secretariat position with responsibility for administrative functions.

Responsibilities of the Secretariat are to:

- Maintain the CCP information from initiation to closure;
- Maintain the library of CCP forms, document templates, and CM procedures;
- Maintain e-mail addresses of CCB persons and organizations;
- Enter updates to this CM Plan as directed by the CCB Co-Chairs;
- Ensure that the CCP has all required information when submitted;
- Maintain the CCB docket and schedule presentations to the CCB;
- Set up CCB and Review Group meetings (facilities, equipment, etc.);
- Publish and distribute CCB meeting agendas;
- Publish and distribute changes to the criteria for change items subject to the CM process (Section 4.2) as directed by the CCB Co-Chairs;
- Prepare and distribute proposal packages to the members in advance of meetings; and,
- Attend CCB meetings, take, distribute and archive meeting notes; prepare, distribute, and archive conference logs;
- Maintain Appendix A of this document.

The Secretariat will also be responsible for performing other support functions as directed by the Co-Chairs and/or the CCB in support of the CM Plan.

4. Configuration Control Guidelines

The configuration control process must take into consideration not only the life cycle phases, but also the type of changes that are subject to the CM process. This section defines the process with respect to both aspects of the process. In addition, the exception process is explained in the event the CCB wishes to allow for exceptions with the criteria for submitting CCPs, based on the unique challenges of managing individual systems.

4.1. System Life Cycle Phase Definitions

The Department has significant responsibility for a variety of corporate business systems. The systems range considerably in size, complexity, functionality, platform, and architecture. They vary also with respect to life cycle phase. Furthermore, and perhaps most relevant to this CM plan, there is limited formal integration among these systems. The systems included at the time this CM Plan was formulated and approved are provided in Appendix A of this document. Over time, the composition of this list will change. The following definitions will apply with respect to the life cycle phases of the systems.

Phase	Definition
Planned	The business function is not currently automated, or is automated in a legacy system scheduled for retirement. Systems in the feasibility stage are included in this definition for purposes of CM.
Acquisition	This includes planning for; the purchase of a business system, developing a

	business solution in-house, or a combination of both to acquire functionality that DOE does not already own or is not planned by another DOE acquisition.
Development	System is not fully operational. Some modules may be operational; but some or even all modules are still being designed. Changes could include, but are not limited to: • Purchase of database management software; • Purchase of Commercial-off-the-Shelf (COTS) product(s); • Purchase of special hardware including additional server for platform; • Contractor developer or consultant salary; and, • User training.
Legacy	An "old" system still being used. Mainframe systems are considered legacy after 12 to 15 years of operation; PC systems are legacy after 7 years. *Legacy* may also refer to obsolete technology and systems scheduled for replacement or retirement. *Obsolete* does not necessarily mean that the hardware or software does not work. More often it can mean that the vendor no longer "supports" the version in question. *Vendor Support* means the vendor will issue patches and upgrades, include the product in its service agreements and provide assistance when technical problems arise. Change items could be as a result of a U.S. Government initiative; or, current technology cannot sustain critical functions until retirement of the system.
Operational	Fully operational, often with moderate enhancements on-going, and not qualifying as "legacy." Change items may include but are not limited to: • Vendor license agreement and/or service contracts; • Contractor salary; and, • Additional acquisitions after system deployment.
Retired	Retired systems are no longer being used or are about to be closed down. They may continue to require management because of the importance of their data.

4.2. Change Items Subject to CM Process

The following table lists the types of Change Items that are subject to the CM Process. The list is not intended to be comprehensive but rather to represent the order of magnitude at which changes are subject to the CM process. It is important to understand that this process applies to *all* business systems that are under the purview of DOE, regardless of their life cycle phase.

Change Item	Criteria
New Systems/Applications	A brand new system. It may actually be intended to replace an existing system(s), but a start-from-scratch plan is being requested or recommended.
Architecture	A significant change to architecture is planned such that system security is affected, new hardware must be purchased, or system software requires recoding.
System Requirements	Expansion represents a significant departure from baseline, either in scope or type of requirement.
Business Functions and/or System Modules	New functionality not identified in existing Project Plan.
Number of Users/User Geography	Any more than 20% new users to the system, regardless of whether or not the system is in production or pilot phase.
Licenses/Service Agreements	Any more than 20% new licenses and/or a change to the licensing agreement with the vendor.
Hardware	Any new hardware that falls under the purview of the Enterprise Architecture guidelines.
Commercial-off-the-Shelf (COTS) Products	Any new software and supporting hardware that falls under the purview of the Enterprise Architecture guidelines.

The application project teams will be responsible for managing and reporting the changes that fall outside of the qualified changes outlined in the next section of this document. At any point in time the CCB can request an audit of the project-managed changes and make corrections to the thresholds and reporting criteria accordingly. The reporting criteria and any associated thresholds will be determined by the Co-Chairs of the CCB. The rule of thumb is that all IT related activities are subject to the CM process and require the submission of a CCP and approval by the CCB. A collection of small changes that fall below the criteria is not an acceptable workaround.

4.3. Exceptions to Qualifying Criteria

It is recognized that due to the uniqueness and diversity of systems within DOE, it will be necessary to develop a process whereby system owners can request a change to the qualifying criteria identified above. All requests must be submitted in writing to the Secretariat and will be reviewed by the CCB during regularly scheduled meetings. The Secretariat will be responsible for managing the exceptions.

5. Configuration Control Process

The Configuration Control Process consists of four primary steps, these include;

- Pre-Initiation Phase;
- Initiating a CCP;

- Assessment and Recommendations;
- CCB Actions; and,
- Notification and Tracking.

The following explains each of the steps and who is responsible for each step in the process. At the end of this section is a diagram (Figure 2) of the process.

5.1. Pre-initiation Phase

Prior to submitting a CCP, the system owner must have submitted an Exhibit 300 and obtained approval by the CIO and CFO for each major new and on-going major project, system, or acquisition, and operational (steady state) asset. The Exhibit 300 documentation will be required at the time of initiating a CCP. The following criteria will be used to determine if an Exhibit 300 is required:

- An estimated investment cost of $2 million or more in one year;
- A financial system with an estimated investment cost of $500 thousand or more in one year
- Requires special management attention because of its importance to the agency mission;
- Has high development, operating, or maintenance costs, high risk or high return;
- Plays a significant role in the administration of agency programs, finances, property or other resources;
- Is E-Government in nature or uses e-business technologies, regardless of dollar value.

Large infrastructure investments (e.g., major purchases of personal computers or local area network improvements) must also be evaluated against the above criteria.

If the CCP does not meet any of the above criteria, this phase may be bypassed.

Further guidance on development of Exhibit 300 business case reports can be found on the Office of the Chief Information Officer (CIO) IT Planning website at http://cio.doe.gov/ITReform/Planning/index.htm. Questions related to DOE's IT investment reporting requirements can be directed to Office of the CIO, IT Reform.

5.2. Initiating a CCP

Submission of CCP Form - All changes are recorded on the CCP Form (see Appendix B) by the originating authority. CCPs are submitted to the CM Secretariat. The form requires standard information, and Originators are encouraged to attach additional information. For convenience, all correspondence and supporting documentation must be provided to the Secretariat in electronic format.

In the event the Originator wishes to formally present to the CCB to clarify and defend the CCP, they must inform the Secretariat upon submission of the CCP.

Minimum Requirements

All costs associated with the following items must be submitted in detail with the completed CCP. The costs must be categorized into the following categories:

- Hardware, including networks
- Software, COTS or custom developed
- Integration and Configuration support
- Database Administration
- Training and Documentation
- Annual Licensing Costs
- Cost of Operations
- Other costs associated with implementing the system.

This information is to be provided on Exhibit 1 of the Configuration Change Proposal (CCP).

Presentations - Presentation materials must be submitted to the CM Secretariat for records management purposes, and the Secretariat may be asked to distribute these to CCB members at the meeting or in advance if the Originator requests this service and allows sufficient time. Presentations will be confined to one-half hour in duration. Persons with an interest in the CCP are encouraged to attend presentations. This includes Technical Monitors, System Owners, contractor support Project Leaders, and others with special skills or knowledge. It will be the responsibility of the Originator to notify the Secretariat of the attendees in advance to ensure the conference room will accommodate the additional attendees.

Assignment of Tracking Number - The Secretariat will assign a tracking number to the CCP and log it into the CM database.

Review of CCP for Completeness - The Secretariat is responsible for reviewing all CCPs to verify completion. In the event a CCP is incomplete, at the request of the Secretariat, the Originator is responsible for providing the additional information. The Secretariat will retain all supporting documents.

Submission of CCP to Review Group- Once the CCP Form and package are complete; the Secretariat distributes these materials to the Review Group and CCB members.

5.3. Assessment and Recommendation

Review of CCPs by the Review Group – The Secretariat will distribute the CCPs to the Review Group, allowing for a minimum of 15 working days for review. The Review Group is responsible for preparing and submitting questions or concerns they want to raise regarding the CCP to the Secretariat. The Secretariat will be responsible for contacting and following up with the Originator to ensure all the questions/concerns are addressed in a timely manner. Failure to comply with the requests of the Secretariat may cause a delay in processing and submission to the CCB.

Distribution and Retention of Materials - The Secretariat will be responsible for retaining and distributing any materials created by the Review Group that are relevant to the CCPs.

Review Group Recommendations – The Review Group is responsible for reviewing the CCPs in detail and providing recommendations to the CCB prior to the CCB meeting.

Establishing Priorities – The Review Group assigns a priority to each CCP to facilitate the order of reviews at the next CCB meeting. Priority rules are as follows:

- High priority items are scheduled for presentation at the next regularly scheduled CCB session, or, if necessary, the CCB Co-Chairs may call for a special session;
- Medium priority items are scheduled for the next open slot on the CCB docket;
- Low priority items are placed at the bottom of the docket; and
- If a low priority CCP is not scheduled for a presentation for two consecutive months, the priority automatically changes to medium, and the item is scheduled for the next available slot.

Recording of Recommendations and Priorities - The Secretariat will be responsible for obtaining the recommendations and priorities from the Review Group and preparing the appropriate materials for the CCB Meetings.

5.4. Configuration Control Board Actions

Scheduling CCB Meetings – At the request of the CCB Co-Chairs, the Secretariat will schedule the CCB meetings once a month on the first Tuesday, depending on volume and necessity. In certain emergency situations, such as a system failure or other significant event requiring immediate action, the CM process may be waived or otherwise expedited by the CCB Co-Chairs.

Facilitation of Meetings – The Secretariat will assist the Co-Chairs of the CCB in the facilitation of the meeting, which will include;

- Scheduling the conference room;
- Notifying members of the meeting;
- Preparing packages of materials for the members;
- Preparing the docket of CCPs to be discussed;
- Scheduling the presentations, as necessary;
- Taking minutes of the meeting;
- Recording the results of the meetings; and,
- Managing any follow-on requirements dictated by the CCB.

Voting - A simple majority of votes cast is needed to take action on a CCP. A simple majority will be defined as the following:

# of CCB members present	# of Votes required to take action
7	4
8 or 9	5
10 or 11	6

A quorum will be defined as seven members of the board being present. Representation from NNSA and EM are required for a quorum to exist.

The CCB votes to establish one of the following outcomes:

CCB Vote	Ensuing Action
Recommend for Approval	Originator is notified to proceed with the CCP.
Suspended	CCP is held in suspense until the originator meets certain conditions or makes specific modifications ad directed by the CCB.
Not Approved, returned for revisions	The CCP is not approved by the CCB and returned to the originator for revision.
Rejected	CCP is closed without further action.

In the event of a tie vote, a special session of the CCB will be convened and will require full Board attendance.

Conditions and Costs - Frequently the CCB approval also addresses budget estimates accompanying the CCP. For large or complex CCPs, the budget description may be divided among components, with conditions or specifications as to how/for what purpose the money is actually spent. The CCB retains the authority to be as general or specific in this regard as appropriate any information requested by the CCB must be documented in the Change Approval Form by the originator.

Change Approval - The CCB documents the approval information at the level of detail it expects the Originator to implement and track the change action and the expenditure of funds allocated. The detail varies, depending both on the level of detail required by the CCB and the complexity of the CCP. Appendix B contains a Configuration Change Approval (CCA) form. The CCB completes this form and the Secretariat distributes it to the CCB members and to the Originator.

Executive or Closed Session - The CCB reserves the right to exercise discretion to convene in closed session for deliberation and voting. It is expected that this choice will be infrequent. Any decisions from the closed session will be recorded and distributed using normal procedures of the Secretariat.

Escalation Process - To ensure the process is fair and equitable to all parities, an escalation process has been established to provide a process in the event an Originator has issues/concerns

with the outcome of the CCB meeting. The following explains the process; all appeals must be filed in writing with the Secretariat and submitted within 30 days of the CCB meeting where the CCP was considered.

5.5. Notification and Tracking

Recording of Meeting Results - When the Board votes to reject a proposal, an explanation must be provided for the rejection. The Secretariat records the vote outcome and notifies the Originator in writing by forwarding a copy of the Change Approval Form completed by the CCB.

Configuration Control Tracking - The Secretariat provides regular and ad hoc reports to the CCB on the status of CCPs and Change Approvals. The Change Approval Form specifies how often the CCP Originator should provide tracking information and identify required information.

For significant Change Items, the CCB Co-Chairs may at times request an Originator to provide an update Status Briefing at a CCB meeting. The CCB Co-Chairs designate how often the Status Briefing will occur for a given Change Approval. The Secretariat notifies the Originator when a briefing is coming due, schedules the time, and adds the items to the appropriate agenda.

The purpose of Control Tracking is to identify the point at which the CCP is fully implemented so that final budget figures can be entered, final Configuration Items updated, and the CCP itself closed.

6. Linkages

The CM process has linkages with the following:

- *DOE Budget Process* – The DOE budget process is a precursor to initiating the CCP process. The budget components, specifically Exhibit 300 are required for each major new and on-going major project, system, or acquisition, and operational (steady state) asset. In order to avoid duplication of effort, system owners are required to submit an Exhibit 300 prior initiating the CCP process, based on the criteria outlined in Section 5.1 of this document. Under certain circumstances, the CCB may require the originator of a CCP to formally complete the budget process.

- *Capital Planning and Investment Control Process (CPIC)* – All CCP's must meet and follow CPIC guidelines. Under this process, each ongoing or proposed IT investment is subject to consistent selection criteria, control mechanisms and evaluations to ensure that all IT investments are justified and well managed. Under certain circumstances, the CCB may require the originator of a CCP to formally complete the CPIC process.

- *IT Project Management Process* – All CCP's are subject to the IT project management process, which defines the system and infrastructure development phases for IT

initiatives. In addition, ongoing IT projects are evaluated as to their continuing ability to effectively and efficiently meet DOE's business needs.

Further guidance on the information above, can be found on the Office of the Chief Information Officer (CIO) IT planning website at http://cio.doe.gov/ITReform/Planning/index.htm. Questions related to DOE's IT policies can be directed to Office of the CIO, IT Reform.

Change Proposal Processing Steps
(Submission to Approval)

Orig submits CCP to Secretariat

Secretariat reviews and logs

Is CCP complete?

No

Yes

Secretariat returns CCP to Orig for revision or closure

Secretariat sends CCP to RG

Review Group recommends and prioritizes

Secretariat records RG approval recommendation

RG recommends approval?

No

Yes

Secretariat adds to CCB agenda and schedules presentation, if necessary

CCB approves or rejects CCP

Secretariat publishes change for action

CCB accepts?

1. Suspended
2. Not Approved

Recommends for Approval

Orig acts on CCP

Orig reports status to Secretariat

Secretariat issues status report to CCB

Action completed?

No

Yes
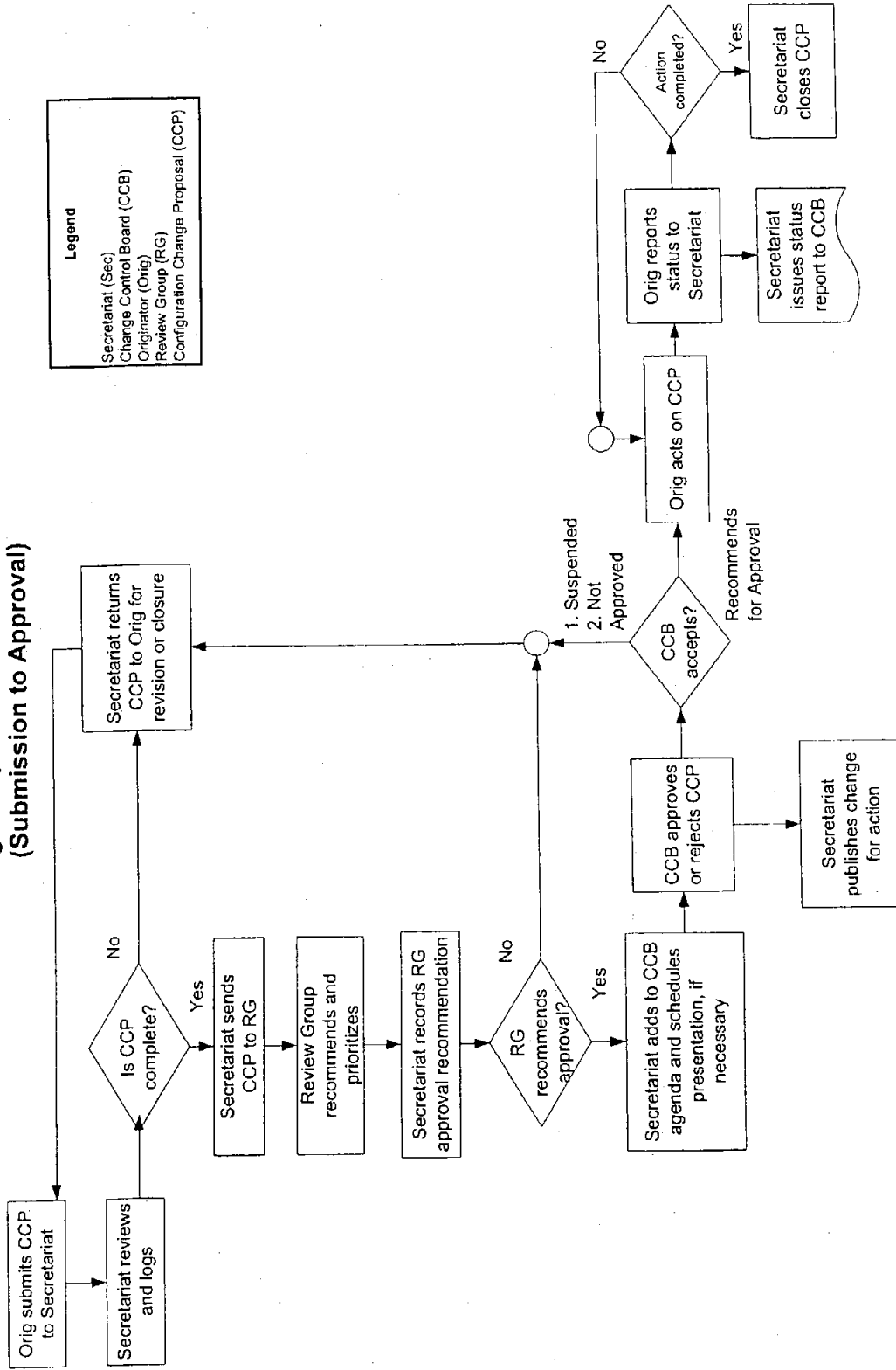
Secretariat closes CCP

Figure 2

Appendix A – DOE Enterprise Architecture Systems Baseline

DOE Business Systems Listed by Acronyms

OMBE Ownership (Indicated by *)	Acronym	System Name	Life Cycle Phase
	ACMSS	Advisory Committee Management Status System	Operational
	ACTS	Authorized Classifier Tracking System	Operational
*	ANA	Advance Notification of Awards System	Operational
	AOP	Annual Operating Plan	Operational
	APPLIX	APPLIX (Help Desk)	Operational
	ATS	Applicant Tracking System	Operational
*	BARC - Web	Budget and Reporting Code System	Operational
	BEFS	Budget Execution Finance System	Operational
	BMIS - Net	Business Management Information System (BMIS - Net)	Operational
*	BRS	Budget Ranking System	Operational
*	BTS	Budget Table System	Legacy
	CAFS	Computerized Appraisal Follow-Up System	Operational
*	CAIS	Consolidated Accounting and Investment System	Operational
	CALLUP	Call-up Online Locator System	Operational
*	CAS	Condition Assessment Survey Program	Operational
	CATS - EH	Correspondence and Action Tracking System	Operational
	CATS - NN	Computerized Action Tracking System	Operational
*	CHRIS	Corporate Human Resources Information System	Operational
	CID	Central Internet Database	Operational
*	CLOSE	Contract Closeout	Operational
	COMSEC	Communications Security	Operational
*	COTS	Consent Order Tracking System	Operational
*	COTS - IS	Consent Order Tracking System Investment System	Operational
	CTS	Correspondence Tracking System	Operational
	CTS-RW	Correspondence Tracking System (RW)	Operational
*	CUTS	Contracts Under Twenty Five Thousand Dollars	Operational
*	DARTS - WB	Departmental Audit Report Tracking System	Operational
*	DFWP	Drug-Free Workplace Program	Operational
*	DIMS	Departmental Inventory Management System	Operational
	Directives Portal	DOE Directives Portal	Operational
*	DISCAS	Departmental Integrated Standardized Core Accounting System	Legacy
	DISS	DOE Integrated Safeguards and Security	Operational
*	DOCS	Document Online Coordination System	Operational
	DOE Info	DOE Info	Operational
*	DOE/EC-Web	Electronic Commerce Web	Operational
	DP – MRS	DP Management Reporting System	Operational
	DPDAS	DP Document Accountability System	Operational
*	EADS	Energy Asset Disposal System	Operational
	EDMS	Electronic Document Management System	Operational
	EFAS	Electronic Funding Administration System	Operational
	EIS - EE	Executive Information System	Operational
	EIS - FE	Enterprise Information System	Operational
	EM - PADS	EM - Procurement Assistance Data System	Operational
	EMCTS - IV	EM Commitment Tracking System	Operational

OMBE Ownership (Indicated by *)	Acronym	System Name	Life Cycle Phase
	EMP - SEP	Employee Separation	Operational
	ESH/Plan	Environment, Safety, and Health Mgmt Plan Info System	Operational
*	ETA	Energy Time and Attendance	Legacy
	EWM	Execution Work Management	Operational
*	FAIR Act Database	Federal Activities Inventory Reform (FAIR) Act Database	Operational
*	FCRS	Functional Cost Reporting System	Operational
	FDRS	Financial Disclosure System	Operational
*	FDS	Funds Distribution System	Legacy
*	FDW	Financial Data Warehouse	Operational
	FIMS	Facilities Information Management System	Operational
*	FIS	Financial Information System	Operational
	FIVRS	Financial Information Variance Reporting System	Operational
	FMIS	Financial Management Information System	Operational
	FTMS	Foreign Travel Management System	Operational
	HQ - BADGE	HQ Security Badging System	Operational
	HSO	Headquarters Security Office	Operational
*	IIPS	Industry Interactive Procurement System	Operational
	InfoBridge	DOE Information Bridge	Operational
	IPA	Interagency Personnel Act (IPA) Funding System	Operational
	IPABS	Integrated Planning, Accountability, and Budget System	Operational
	ITIPS	ITIPS	Operational
*	JOULE	JOULE Performance Measurement System	Development
	LANMAS	Local Area Network Accounting System	Operational
*	LDS	Labor Distribution System	Legacy
	LL	DOE Lessons Learned Information System	Operational
*	MARS	Management Analysis Reporting System	Legacy
	NABEX	NNSA Budget Execution System	Development
	NS Cluster	NS Cluster FOIA Database	Operational
	N/a	Various Personnel Action Tracking Systems	Operational
	ORPS	Occurrence Reporting and Processing System	Operational
*	PADS	Procurement and Assistance Data System	Legacy
*	PALS	Program Activity by Location System	Operational
*	PAMS	Property Accounting and Management System	Retired
*	PARS	Project Assessment and Reporting System	Operational
*	PATS	Procurement and Assistance Tracking System	Operational
*	PAYS	Payroll System	Retired
	PCDOCS	PCDOCS	Operational
	PERSEC	Personnel Security Case System	Operational
	PERSONNEL	Vital Statistics Personnel Tracking	Operational
	Phone - SC	Phone Listing	Operational
*	PMA	Payroll Modeling System	Operational
	PRATS	Procurement Request and Authorization Tracking System	Operational
*	PRB	Performance Review Board	Operational
	ProMIS	Project Management Information System	Operational
	PTS	Progress Tracking System	Operational
*	PYCPR	Prior Year Construction Project Reporting	Operational
	R&D	Research and Development Tracking System	Operational
	R&DPS	Research and Development Project Summaries	Operational
	REVCOM	DOE Directives Portal	Operational
	RMIS	Records Management Information System	Operational

OMBE Ownership (Indicated by *)	Acronym	System Name	Life Cycle Phase
	SAP/R3	Systems Applications Program	Operational
	SBIR	Small Business Innovative Research System	Operational
	SBIRMAIL	Small Business Innovative Research Mailing List	Operational
	SC - PATS	Personnel Action Tracking System	Operational
	SCCAL	SC Calendar System	Operational
	SMART	System Management for Annual Requested Training	Operational
	Solomon	Tracking System for the Secretary's Performance Agreement with the President	Retired
*	SPTS	Software Project Tracking System	Operational
*	SRS	Subcontracting Reporting System	Operational
	SSIMS	Safeguards and Security Information Management System	Operational
*	STARS	Standard Accounting and Reporting System	Development
	STTR	Small Business Technology Transfer System	Operational
*	Sunflower	Property Accounting and Management	Development
	Timecard - AL	Timecard	Operational
	Timecard - ID	Timecard	Operational
	Timecard - OR	Timecard - Labor Distribution - OR	Operational
	Timecard - SR	Timecard - Labor Distribution - SR	Operational
	TIMS	Technical Information Monitoring System	Operational
*	TM	Travel Manager	Operational
	TTAPS	Technology Transfer Agreement and Proposal System	Operational
*	WCF	WCF Billing System	Operational
	WDACS	Weapons Data Access Control System	Operational
	WFIS	Workflow Information System	Operational
		EM - 50 Business System	Operational
		FE HQ R&D	Operational

Appendix B – Forms

<table>
<tr><td colspan="3" align="center">DOE Business Systems Configuration Management
CONFIGURATION CHANGE PROPOSAL (CCP)</td></tr>
<tr><td colspan="3">This CCP form is used for requesting changes to the Systems Baseline for DOE Business Systems. These CCPs will be reviewed by the Review Group and distributed to members of the Configuration Control Board (CCB). The CCB will review and evaluate prior to sending them to the Configuration Control Board (CCB). Please attach any additional supporting documents or information in electronic format and submit to the CM Secretariat.</td></tr>
<tr>
<td>System Name:
_____</td>
<td>System Acronym:
_____</td>
<td>System Type: (Select One)
Legacy ___   Operational ___
In Development ___   New___</td>
</tr>
<tr>
<td>Date/Time Requested:
_____ _____</td>
<td>Date/Time Cleared:
_____ _____</td>
<td>Change Request Number:
_____</td>
</tr>
<tr>
<td colspan="2">Requestor Name: Organization: Phone:
_____ _____ _____
Proposal Manager/Phone:
_____ _____</td>
<td>Review Group recommendation:
Approve/Disapprove
Comments:</td>
</tr>
<tr>
<td colspan="2">Configuration Items: Baseline Version: Baseline Date:
  Business Functions_____   _____   _____
  Database Product _____   _____   _____
  COTS Product   _____   _____   _____
  System Modules   _____   _____   _____
  Vendor Licenses   _____   _____   _____
  Hardware   _____   _____   _____
  Number of Users _____   _____   _____
   Other   _____   _____   _____</td>
<td></td>
</tr>
<tr><td colspan="3">Reason for Change: Gov't Initiative: _____   Technology: _____   Other: _____   (Provide Attachment)</td></tr>
<tr><td colspan="3">Title:</td></tr>
<tr><td colspan="3">Estimated Cost:
Detailed cost data must be provide on Exhibit 1.</td></tr>
<tr><td colspan="3">Description: (Include software/hardware/systems involved. Provide Attachments as Needed: _____)</td></tr>
<tr><td colspan="3">Summary of Proposed Baseline Changes: (Provide Attachments as Needed: _____)</td></tr>
<tr><td colspan="3">Summary of Locations:</td></tr>
<tr><td colspan="3">User Communities of Interest:</td></tr>
<tr><td colspan="3">Major Milestones:</td></tr>
<tr><td colspan="3">Project Outline: (Include testing plans):</td></tr>
</table>

Exhibit 1

OMBE Configuration Management
CONFIGURATION CHANGE PROPOSAL (CCP)
Estimated Cost Data

Total Cost	Required: Y/N	Cost
Hardware, including networks		
Software, COTS or custom developed		
Integration and Configuration Support		
Database Administration		
Training and Documentation		
Annual Licensing Costs		
Cost of Operations		
Other costs associated with implementing the system		
Total Cost		

DOE Business Systems Configuration Management
CONFIGURATION CHANGE APPROVAL (CCA)

This CCA form is used for documenting approved changes to the Systems Baseline for DOE Business Systems. These CCAs are issued by the Configuration Control Board (CCB). This form sets forth conditions and limitations that may be attached to the Approval, including budget and cost.

System Name: _____	System Acronym: _____	System Type: (Select One) Legacy ___ Operational ___ In Development ___ New ___
Date/Time Approval Granted: _____ _____	Date/Time Cleared: _____ _____	Change Request Number: _____
System Owner Name: Organization: Phone: _____ _____ _____		Status Update Due Date: _____
Proposal Manager Name/Phone: _____ _____		Briefing: ____ Rpt Only: ____

Configuration Items Approved: Conditions   Budget Amt Approved
                                  (Y/N)

Database Product ____   _____   _____
COTS Product   ____   _____   _____
System Modules   ____   _____   _____
Vendor Licenses ____   _____   _____
Hardware   ____   _____   _____
Number of Users ____   _____   _____
 Other   ____   _____   _____

CCB Comment: (Attachment? Y   N)
_____
_____
_____
_____
_____
_____
_____
_____
_____

Appendix C – Configuration Management Acronyms

Acronym	Term or Phrase
CA	Change Approval
CCA	Configuration Change Approval (Form)
CCB	Configuration Control Board
CCP	Configuration Change Proposal (Form)
CFS	Corporate Financial Systems
CM	Configuration Management
COTS	Commercial-off-the-Shelf
DOE	Department of Energy
GCM	Group Configuration Manager
I-MANAGE	Integrated Management Navigation System Program
OCIO	Office of Chief Information Officer
OMBE	Office of Management, Budget and Evaluation/Chief Financial Officer
POC	Point of Contact
PSO	Programmatic Secretarial Office
RG	Review Group

Note: *See Appendix A for acronyms of Baseline Systems*

Appendix D – Glossary

Configuration Management Terms

Term or Phrase	Definition
Baseline	Identification and definition of the starting point for every element in a configuration.
CCB Docket	The queue of Change Proposals waiting to be considered by the Configuration Change Board.
Change Approval	Decision by Configuration Control Board that a requested change to a Baseline System may be made.
Configuration Change Proposal	Request to modify an item in a Baseline.
Commercial-off-the-Shelf	Software packages purchased as ready-made products.
Configuration	Cluster of components and their settings that make up everything needed for a computer system to operate; it includes software, hardware, operating systems, COTS products, and business practices.
Configuration Control	The application of rules and permissions before anything can be changed.
Configuration Control Board (CCB)	Body that makes final decision on Change Proposals and establishes budget.
Configuration Identification	The process of listing, in detail, every item (Configuration Item) that a CM Plan covers.
Configuration Item	A specific entity that falls under CM. Examples are computer programs or training manuals. The Configuration Item list indicates the granularity at which CM is being practiced.
Configuration Management	Rules and procedures to govern changes made to a baseline
Configuration Management Plan	Documentation of CM practices within an organization or for a particular computer system.
Core Systems	Large computer applications that support the main business operations and administrative activities of the Department.
Corporate (DOE)	The entire DOE community – includes all organizations that comprise the Department – Headquarters, Field Offices, the National Laboratories, the Power Administrations, and other entities such as the Naval Reactors or Strategic Petroleum Reserves.
Integrated Management Navigation System (I-MANAGE) Program	Team established to lead OMBE effort to integrate business systems.
Development System (or System in Development)	System is not fully operational. Some modules may be operational, but some or even all modules are still being designed. Systems entirely in the planning/feasibility stage can be included in this definition for purposes of CM.

Group Configuration Manager	Representative from DOE organization who is responsible for CM issues and practice within that organization.
Legacy System	An "old" system still being used. Mainframe systems are considered legacy after 12 to 15 years of operation; PC systems are legacy after 7 years. Legacy may also refer to obsolete technology, and systems scheduled for replacement or retirement may be called legacy.
Module	Collection of computer programs for a particular system that handles a single large process such as Reports or Data Entry or Tables Maintenance.
Operational System	Fully operational, often with moderate on-going enhancements, and not qualifying as "legacy".
Originator	Person or organization that initiates a Change Proposal.
Programmatic Secretarial Office	The Offices at DOE Headquarters responsible for the primary missions of DOE such as safeguarding weapons and energy research.
Retired System	System no longer being used or about to be closed down. It may continue to require management because of the importance of its data.